# Testimony of

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Chairman Bachus, Congressman Sanders, members of the Subcommittee on Financial Institutions and Consumer Credit, thank you for inviting me here this morning to testify on behalf of the Board of Governors of the Federal Reserve System on Basel II and H.R. 2043. Basel II, of course, is shorthand for the proposal being negotiated in Basel, Switzerland, among the major countries of the world to develop a new agreement on capital standards for internationally active banking organizations. This new accord would replace the existing accord, Basel I, developed fifteen years ago.

#### **Basel I and the Changing Marketplace**

Basel I has served the United States well, by facilitating an international capital standard that contributes to competitive equity between our banks and foreign banks in markets here and abroad. It has, unfortunately, outlived its usefulness for our larger banking organizations, which have become increasingly complex and driven by new technologies that permit financial transactions unimagined when Basel I was initiated as the international standard.

From the perspective of banks, supervisors, counterparties, and stakeholders, capital is a cushion to ensure banks' safety and soundness and to provide a benchmark by which their financial condition can be measured. The nature of how the large banks of the world do business has changed so much that, for them, Basel I now provides neither an appropriate cushion nor an accurate risk benchmark. For these large banks, Basel I has to be replaced, particularly in a world whose financial markets are so interrelated that significant difficulties at any one of the largest banks would place the world financial system at risk.

#### **Basel I versus Basel II**

We are fortunate that changes in technology in the last decade have permitted modern principles of finance to be applied in banking, especially at the larger banks. The new methodologies have already begun to revolutionize risk measurement and management in ways that promise greater safety, soundness, and stability in our banking and financial system, particularly if the new methods are harnessed to the supervisory process. Basel II holds out that promise and builds on the best practices in risk management in banking over the past decade.

The Federal Reserve believes it is imperative that both banks and their supervisors act now to improve risk measurement and management; to link, to the extent that we can, the amount of required capital to the amount of risk taken; to attempt to further focus the supervisor-bank dialogue on the measurement and management of risk and the risk-capital nexus; and to make all of this transparent to the counterparties and uninsured depositors that ultimately fund--and hence share--these risk positions. That is what Basel II seeks to do while at the same time also seeking a level regulatory playing field for banks that compete across borders.

How does Basel II differ from Basel I? As under Basel I, a bank's risk-based capital ratio would have a numerator representing the capital available to the bank and a denominator that is a measure of the risks faced by the bank, referred to as "risk-weighted assets." The definition of regulatory capital in the form of equity, reserves, and subordinated debt and the minimum required ratio, eight percent, are not changing. What would be different is the definition of risk-weighted assets, that is, the methods used to measure the "riskiness" of the loans and investments held by the bank. It is this modified

definition of risk-weighted assets, the greater risk-sensitivity, that is the hallmark of Basel II. The modified definition of risk-weighted assets will also include an explicit, rather than implicit, treatment of "operational risk."

#### **Developing Basel II**

The development of Basel II has been highly transparent and over the past five years has been supported by a large number of public papers and documents on the concepts, framework, and options. The Basel consultative paper (CP3) published in late April was the third in the series. After each previous consultative paper, extensive public comment has been followed by significant refinement and improvement of the proposal. CP3 itself is out for public comment until July 31.

During the past five years, a number of meetings with bankers have been held in Basel and elsewhere, including in the United States. Over the past eighteen months, I have chaired a series of meetings with bankers, often jointly with Comptroller Hawke. More than twenty U.S. banks late last year joined 365 others around the world in the third Quantitative Impact Study (QIS3) intended to estimate the impacts of Basel II on their operations. The banking agencies last month held three regional meetings with banks that would not, under the U.S. proposal, be required to adopt Basel II, but may have an interest in choosing to do so. Our purpose was to ensure that these banks understand the proposal and the options it provides them. In about one month the banking agencies in this country hope to release an Advance Notice of Proposed Rule Making (ANPR) that will outline and seek comment on specific proposals for the application of Basel II in this

<sup>&</sup>lt;sup>1</sup> The documents used in these presentations are available at the Board's web site, <a href="http://www.federalreserve.gov/banknreg.htm">http://www.federalreserve.gov/banknreg.htm</a> (See "Documents Relating to U.S. Implementation of Basel II").

country. In the last week or so we have also released two White Papers to help commenters frame their views on commercial real estate and the capital implications of recognizing certain guarantees. These, too, are available at our website.

This dialogue with bankers has had a substantive impact on the Basel II proposal. I have attached to my statement a comparison of some of the major provisions of Basel II as proposed in each of the three consultative documents published by the Basel Supervisor's Committee (appendix 1). As you can see, commenters have had a significant effect on the shape and detail of the proposal. For example, comments about the proposed crude formulas for addressing operational risk led to a change in the way capital for operational risk may be calculated; the change allows banks to use their own methods for assessing this form of risk as long as these methods are sufficiently comprehensive and systematic and meet a set of principles-based qualifying criteria. Industry comments and suggestions have also led to a significant evolution since the first consultative paper in the mechanism for establishing capital for credit risk; as a result, a large number of exposure types are now treated separately. Similarly, disclosure rules have been simplified and streamlined in response to industry concerns. Most important, the Basel Committee, and certainly all the U.S. representatives, still have an open mind on all the provisions in CP3 and will try once again to evaluate commenters' views and suggestions as we try to complete negotiations by the end of this year.

Perhaps an example of the importance of supporting evidence in causing a change in positions might be useful. As some members of this committee know, the Federal Reserve had concluded earlier, on the basis of both supervisory judgment and the available evidence, that the risk associated with commercial real estate loans on certain

existing or completed property required a capital charge higher than that on other commercial real estate and on commercial and industrial loans. In recent weeks, however, our analysis of additional data suggested that the evidence was contradictory. With such inconsistent empirical evidence, we concluded that, despite our supervisory judgment on the potential risk of these exposures, we could not support requiring a higher minimum capital charge on these loans, and we will not do so.

In the same vein, we remain open minded about new suggestions, backed by evidence and analysis, and approaches that simplify the proposal but still attain its objectives. Both the modifications of the proposals in CP3 and the changes in U.S. supervisory views, as evidenced by the commercial real estate proposal, testify to the willingness of the agencies, even at this late stage of the negotiating process, to entertain new ideas and to change previous views when warranted.

It should be underlined that response to public comments has eliminated complexity in some parts of the proposal but added complexity in others. Banking organizations have different procedures and processes; one-size-fits-all rules would force many organizations to spend large sums and reduce their operating efficiencies to change their approaches. Permitting banks to use their own methodologies requires regulatory options that, in turn, impose rules that are more complex. Indeed, recent suggestions from bankers have led us to add questions to our ANPR with the goal of obtaining information that may lead to additional options, and hence complexities, in Basel II in our final round of negotiations.

#### **Scope of Application in the United States**

We are interested in comments from all sections of the banking industry, even though nearly all the banking organizations in this country will remain under the current capital regime. I began my statement today with the observation that Basel I, the basis for the current capital rules, has outlived its usefulness for the larger banking organizations. How then did we conclude that most of our banks should remain under rules based on the old accord?

#### Banks Remaining Under Current Capital Rules

To begin with, most of our banks do not yet need the full panoply of sophisticated risk-management techniques required under the advanced versions of Basel II. In addition, for various reasons, most of our banks now hold considerable capital in excess of regulatory minimums: More than 93 percent have risk-weighted capital ratios in excess of 10 percent--an attained ratio that is 25 percent above the current regulatory minimum.

Moreover, U.S. banks have long been subject to a comprehensive and thorough supervisory process that is much less common in most other countries planning to implement Basel II. Indeed, U.S. supervisors will continue to be interested in reviewing and understanding the risk measurement and management process of all banks, those that remain on Basel I and those that adopt Basel II. Our banks also disclose considerable information through regulatory reports and under accounting and Securities and Exchange Commission rules so that our banks are already providing significant disclosures--consistent with another aspect of Basel II.

Thus, when we balanced the costs that would be faced by thousands of our banks under a new capital regime against the benefits--slightly more risk sensitivity of capital

requirements under, say, the standardized version of Basel II for credit risk, and somewhat more disclosure--it did not seem to be worthwhile to require most of our banks to take that step. Countries with an institutional structure different from ours might clearly find universal application of Basel II to be of benefit to their banking system, but we do not think that imposing Basel II on most of our banks is either necessary or practical.

#### Banks Moving to Basel II

We have an entirely different view for our largest and most complicated banking organizations, especially those with significant operations abroad. Among the important objectives of both Basel I and the proposed Basel II is the promotion of competitive consistency of capital requirements for banks that compete directly in global markets. The focus on global markets is one of the reasons that we did not believe it was necessary to impose Basel II on most U.S. banks because they operate virtually entirely in domestic markets.

Another important objective in developing the negotiating positions for U.S. supervisors has been encouraging the largest banking organizations of the world to continue to incorporate into their operations the most sophisticated risk measurement and management techniques. As I have noted, these entities use financial instruments and procedures that are not adequately captured by the Basel I paradigm. They have already begun to use--or have the capability to adopt--the techniques of modern finance to measure and manage their exposures; and, as I noted, difficulty at one of the largest banking organizations could have drastic impacts on global financial markets. In our view, prudential supervisors and central bankers would be remiss if they did not address

the evolving complexity of our largest banks and ensure that modern techniques were being used to manage the risks being taken. The U.S. supervisors have concluded that the advanced versions of Basel II--the Advanced Internal Ratings Based (A-IRB) approach for measuring credit risk and the Advanced Measurement Approaches (AMA) for measuring operational risk--are best suited to achieve this last objective.

Under the A-IRB approach, a banking organization would have to estimate, for each credit exposure, the probability that the borrower will default, the likely size of the loss that will be incurred in the event of default, and--where the lender has an undrawn line of credit or loan commitment to the borrower--an estimate of what the amount borrowed is likely to be at the time a default occurs. These three key inputs--probability of default (PD), loss given default (LGD), and exposure at default (EAD)--are inputs that would be used in formulas provided by supervisors to determine the minimum required capital for a given portfolio of exposure. While the organization would estimate these key inputs, the estimates would have to be rigorously based on empirical information, using procedures and controls validated by its supervisor, and the results would have to accurately measure risk.

Those banks that are required, or choose, to adopt the A-IRB approach to measuring credit risk, would also be required to hold capital for operational risk, using a procedure to establish the size of that charge known as the Advanced Management Approach (AMA). Under the AMA, banks themselves would bear the primary responsibility for developing their own methodology for assessing their own operational risk capital requirement. To be sure, supervisors would require that the procedures used are comprehensive, systematic, and consistent with certain broad outlines, and must

review and validate each bank's process. In this way, a bank's "op risk" capital charge would reflect its own environment and controls. Importantly, the size of the charge could be reduced by actions that the bank takes to mitigate operational risk. This would provide an important incentive for the bank to take actions to limit their potential losses from operational problems.

To promote a more level global playing field, the banking agencies in the United States will be proposing in the forthcoming ANPR that those U.S. banking organizations with foreign exposure above a specified amount would be in a "core" set of banks--those that would be required to adopt Basel II. To improve risk management for those organizations whose disruption would have the largest effect on the global economy, we would also require banks whose scale exceeds a specified amount to be in the core set of banks, although the amount of overlap with the banks already included under the foreign asset standard is quite large. To further ensure that we meet our responsibilities regarding stability, the agencies will propose, as I noted, that all banks adopting Basel II in the United States would be required to adopt the most sophisticated versions of the new accord--the A-IRB for credit risk and the AMA for operational risk. We are proposing that U.S. implementation of Basel II exclude from use for credit risk the less sophisticated, Foundation Internal Ratings Based (F-IRB) approach and the least sophisticated, Standardized approach, and that it exclude from use for operational risk the Basic Indicator approach and the Standardized approach.

Ten U.S. banks meet the proposed criteria to be among the core group of banks and thus would be required, under our proposal, to adopt A-IRB and AMA. As they grow, other banks could very well meet the criteria and thus shift into the core group in

the years ahead. We would also permit any bank that meets the infrastructure requirements--the ability to quantify and develop the necessary risk parameters on credit exposures and develop measurement systems for operational risk exposures--voluntarily to choose Basel II using the A-IRB and AMA. We estimate that ten large banks now outside the core group would make this decision before the initial implementation date after they make the necessary cost-benefit calculations. These banks would no doubt consider both the capital impact of Basel II as well as the message they want to send their counterparties about their risk-management techniques.

Over time, other large banks, perhaps responding to market pressure and facing declining costs and wider understanding of the technology, may also choose this capital regime, but we do not think that the cost-benefit assessment will induce smaller banks to do so for a very long time. Our discussions with the rating agencies confirm they do not expect that regional banks would find adoption of Basel II to be cost effective in the initial implementation period. Preliminary surveys of the views of bank equity security analysts indicate they are more focused on the disclosure aspects of Basel II, rather than on the scope of application. To be clear, supervisors have no intentions of pressuring any of the non-mandatory banks to adopt Basel II.

If, indeed, ten core banks and about ten other banks adopt Basel II before the initial implementation date, they would today account for 99 percent of the foreign assets and two-thirds of all the assets of domestic U.S. banking organizations, a coverage indicative of the importance of these entities to the global banking and financial system. These data are also indicative of our intention to meet our responsibilities for international competitive equity and best-practice policies at the organizations critical to

our financial stability while minimizing cost and disruption for the purely domestic, less complicated organizations.

#### **Competitive Equity**

The proposed application of Basel II has raised some concerns about competitive equity for U.S. banks. Some are concerned that the U.S. supervisors would be more stringent in their application of Basel II rules than other countries and would thereby place U.S. banks at a competitive disadvantage. To address this concern, the Basel agreement establishes an Accord Implementation Group (AIG), made up of senior supervisors from each Basel member country, which has already begun to meet. It is the AIG's task to work out common standards and procedures and act as a forum in which conflicts can be addressed. No doubt some differences in application would be unavoidable across banking systems with different institutional and supervisory structures, but all of the supervisors, and certainly the Federal Reserve, would remain alert to this issue and work to minimize it. I also emphasize that, as is the case today, U.S. bank subsidiaries of foreign banks would be operating under U.S. rules, just as foreign bank subsidiaries of U.S. banks would be operating under host-country rules.

Another issue relates to the concern *among* U. S. Basel II banks about the potential competitive edge that might be given to any bank that would have its capital requirements lowered by more than that of another Basel II bank. The essence of Basel II is that it is designed to link the capital requirement to the risk of the exposures of each individual bank. A bank that holds mainly lower-risk assets, such as high-quality residential mortgages, would have no advantage over a rival that holds mainly lower-quality, and therefore riskier, commercial loans just because the former would have lower

required capital charges. The capital requirements should be a function of risk taken, and, under Basel II, if the two banks have very similar loans, they both should have very similar capital charges. For this reason, competitive equity among Basel II banks in this country should not be a genuine issue, since capital should reflect the risks taken. Under the current capital regime, banks with different risk profiles have the same capital requirements, creating now a competitive inequity for the banks that have chosen lower risk profiles.

The most frequently voiced concern about possible competitive imbalance reflects the "bifurcated" rules implicit in the U.S. supervisors' proposed scope of application: that is, imposing Basel II, via A-IRB and AMA, for a small number of large banks, and the current capital rules for all other U.S. banks. The stated concern of some observers is that the banks that remain under the current capital rules, with capital charges that are not as risk sensitive, would be at a competitive disadvantage against Basel II banks that would have lower capital charges on less-risky assets. Of course, Basel II banks would have higher capital charges on higher-risk assets and would bear the cost of adopting a new infrastructure, neither of which Basel I banks will have. And any bank that might feel threatened could adopt Basel II if they made the investment required to reach the qualifying criteria.

But a concern remains about competitive equity in our proposed scope of application, one that could present some difficult trade-offs *if* the competitive issue is real and significant. On the one hand is the pressing need to reform the capital system for the largest banks and the practical arguments for retaining the present system for most U.S.

banks. Against that is the concern that there will be an unintended consequence of disadvantaging those banks that remain on the current capital regime.

We take the latter concern seriously and will be exploring it through the ANPR.

But, without prejudging the issue, we see reasons to believe that banks remaining under the current capital regime, as outlined by the agencies' proposed scope of application and the resultant bifurcated regulatory capital system, would experience little, if any, competitive disadvantage.

The basic question is the role of regulatory capital minimums in the determination of the price and availability of credit. Economic analysis suggests that regulatory capital should be considerably less important than the capital allocations that banks make internally within their organization, so-called economic capital. Our understanding of bank pricing is that it starts with the economic capital and the explicit recognition of the riskiness of the credit and is then adjusted on the basis of market conditions and local competition from bank and nonbank sources. In some markets, some banks will be relatively passive price takers. In either case, regulatory capital is mostly irrelevant in the pricing decision, and therefore unlikely to cause competitive disparities.

Moreover, most banks, and especially the smaller ones, hold capital far in excess of regulatory minimums for various reasons. Thus, changes in their own or rivals' regulatory capital minimums generally would not have any effect on the level of capital they choose to hold and would therefore not necessarily affect internal capital allocations for pricing purposes.

In addition, the banks that most frequently express a fear of being disadvantaged by a bifurcated regulatory regime have for years faced capital arbitrage from larger rivals who were able to reduce their capital charges by securitizing loans for which the regulatory charge was too high relative to the market or economic capital charge. The more risk-sensitive A-IRB in fact would reduce the regulatory capital charge in just those areas in which banks are now engaging in capital arbitrage transactions that produce an effective reduction in their current regulatory capital charges. The more risk-sensitive A-IRB imposes, in effect, risk-sensitive capital charges that for lower-risk assets are similar to what the larger banks have been successful for years in obtaining through capital arbitrage transactions. In short, competitive realities may not change in many markets where capital charges would become more explicitly risk sensitive.

Concerns have also been raised about the effect of Basel II on the competitive relationships between depository institutions and their non-depository rivals. Of course, the same argument that economic capital is the driving force in pricing applies. It is only reinforced by the fact that the cost of capital and funding is less at insured depositories than at their non-depository rivals because of the safety net. Insured deposits and access to the Federal Reserve discount window (and Federal Home Loan Bank advances) lets insured depositories operate with far less capital or collateralization than the market would otherwise require and does require of non-depository rivals. Again, Basel II is not going to change those market realities.

Let me repeat that I do not mean to dismiss competitive equity concerns. Indeed, I hope that the comments on the ANPR bring forth insights and analyses that respond directly to the issues, particularly the observations I have just made. But, I must say, we need to see reasoned analysis and not assertions.

#### **Operational Risk**

This discussion has centered on addressing credit risk--the risk that the lender will suffer a loss because of the inability of a borrower to repay obligations on schedule. A few words on operational risk are now in order. Operational risk refers to losses from failures of systems, controls, or people and will, for the first time, be explicitly subject to capital charges under Basel II. Neither operational risk nor capital to offset it are new concepts. Supervisors have been expecting banks to manage operational risk for some time and banks have been holding capital against it. Under Basel I both risks have been implicitly covered in one risk measure and capital charge. But Basel II, by designing a risk-based system for credit risk, separates the two risks and would require capital to be held for each separately.

Operational disruptions have caused banks to suffer huge losses and, in some cases, failure here and abroad. At times they have dominated the business news and even the front pages. Appendix 2 to this statement lists some of these recent events here and abroad. In an increasingly technology-driven banking system, operational risks have become an even larger share of total risk; at some banks they are the dominant risk. To avoid addressing them would be imprudent and would leave a considerable gap in our regulatory system.

Imposing a capital charge to cover operational risk would no more eliminate operational risk than does a charge for credit risk eliminate credit risk. For both risks, capital is a measure of a bank's ability to absorb losses and survive. The AMA for determining capital charges on operational risk is a principles-based approach that obligates banks to evaluate their own operational risks in a structured but flexible way.

Importantly, a bank could reduce its operational-risk charge by adopting procedures, systems, and controls that reduce its risk or by shifting the risk to others through, for example, insurance. This approach parallels that for credit risk, in which capital charges can be reduced by shifting to less-risky exposures or by adopting risk-mitigation techniques such as collateral or guarantees.

Some banks for which operational risk is the dominant one oppose our proposal for an explicit capital charge on operational risk. Some of these organizations tend to have little credit exposure and hence very small *required* capital under the current regime, but would have significant required capital charges should operational risk be explicitly treated under Pillar 1 of Basel II. Such banks, and also some whose principal risks are credit-related, would prefer that operational risk be handled case by case through the supervisory review of buffer capital under Pillar 2 of the Basel proposal rather than be subject to an explicit capital charge under Pillar 1. The Federal Reserve believes that would be a mistake, greatly reducing the transparency of risk and capital that is such an important part of Basel II, and making it difficult to treat risks comparably across banks because Pillar 2 is judgmentally based.

The Federal Reserve takes comfort from the fact that most of the banks to which Basel II will apply in the United States are well along in developing their AMA-based operational risk capital charge and believe that the process has already induced them to adopt risk-reducing innovations. Late last month, at a conference held at the Federal Reserve Bank of New York, presentations on operational risk illustrated the significant advances in operational risk quantification being made by most internationally active banks. The presentations were from representatives of major banks in Europe, Asia, and

North America. Many of the presenters provided detailed descriptions of techniques their own institutions are incorporating for operational risk management.<sup>2</sup> Many banks also acknowledged the important role the Basel process played in encouraging them to develop improved operational risk measurement and management processes.

#### Overall Capital and an Evolving Basel II

Before I move on to other issues, I would like to address the concern that the combination of credit and operational risk capital charges for those U.S. banks that are under Basel II would decline too much for prudent supervisory purposes. Speaking for the Federal Reserve Board, let me underline that we could not support a final Basel II that we believed caused capital to decline to unsafe and unsound levels at the largest banks. That is why we anticipate that the U.S. authorities would conduct a Quantitative Impact Study (QIS) in 2004 to supplement the one conducted late last year; I anticipate at least one or two more before final implementation. It is also why CP3 calls for one year of parallel (Basel I and II) capital calculation and a two-year phase-in with capital floors set at 90 and 80 percent, respectively, of the Basel I levels before full Basel II implementation. At any of those stages, if the evidence suggested that capital were declining too much, the Federal Reserve Board would insist that Basel II be adjusted or recalibrated, regardless of the difficulties with bankers here and abroad or with supervisors in other countries. This is the stated position of the Board and our supervisors and has not changed during the process.

Maintaining the current level of average capital in the banking industry can be accomplished either by requiring each bank to maintain its Basel I capital level or by

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<sup>&</sup>lt;sup>2</sup> These presentations are publicly available on the Federal Reserve Bank of New York website, http://www.newyorkfed.org/pihome/news/speeches/2003/con052903.html

recognizing that there will be divergent levels among banks dictated by different risk profiles. To go through the process of devising a more risk-sensitive capital framework just to end with the Basel I result seems pointless. In the Board's view, banks with lower risk profiles should have, as a matter of sound public policy, lower capital than banks with higher risk profiles. Greater dispersion in required capital ratios, if reflective of underlying risk, is an objective, not a problem to be overcome. Of course, capital ratios are not the sole consideration. The improved risk measurement and management, and their integration into the supervisory system under Basel II, are also critical to ensuring the safety and soundness of the banking system. When coupled with special U.S. features that are not changed by Basel II, such as prompt corrective action, minimum leverage ratios, statutory provisions that make capital a prerequisite to exercising additional powers, and market demands for buffer capital, some modest reduction in the minimum regulatory capital for sound, well managed banks could be tolerable if it is consistent with improved risk management.

I should also underline that Basel II is designed to adapt to changing technology and procedures. I fully expect that in the years ahead banks and supervisors will develop better ways of estimating risk parameters as well as functions that convert those parameters to capital requirements. When they do, these changes can be substituted directly into the Basel II framework, portfolio by portfolio if necessary. Basel II will not lock risk management into any particular structure; rather Basel II will evolve as best practice evolves and, as it were, be evergreen.

#### The Schedule

A few words now about the Basel II schedule. In a few weeks, the agencies will be publishing their joint ANPR for a ninety-day comment period, and will also issue early drafts of related supervisory guidance so that banks can have a fuller understanding of supervisory expectations and more carefully begin their planning process. The comments on the domestic rulemaking as well as on CP3 will be critical in developing the negotiating position of the U.S. agencies, and highlighting the need for any potential modifications in the proposal. The U.S. agencies are committed to careful and considered review of the comments received.

When the comments on CP3 and the ANPR have been received, the agencies will review them and meet to discuss whether changes are required in the Basel II proposal. In November, we are scheduled to meet in Basel to negotiate our remaining differences. I fear this part of the schedule may be too tight because it may not provide U.S. negotiators with sufficient time to digest the comments on the ANPR and develop a national position to present to our negotiating partners. There may well be some slippage from the November target, but this slippage in the schedule is unlikely to be very great.

In any event, implementation in this country of the final agreement on Basel II will require a Notice of Proposed Rulemaking (NPR) in 2004 and a review of comments followed by a final rule before the end of 2004. On a parallel track, core banks and potential opt-in banks in the United States will be having preliminary discussions with their relevant supervisors in 2003 and 2004 to develop a work plan and schedule. As I noted, we intend to conduct more Quantitative Impact Studies, starting in 2004, so we can be more certain of the impact of the proposed changes on individual banks and the

banking system. As it stands now, core and opt-in banks will be asked by the fall of 2004 to develop an action plan leading up to final implementation. Implementation by the end of 2006 would be desirable, but each bank's plan will be based on a joint assessment by the individual bank and its relevant supervisors of a realistic schedule; for some banks the adoption date may be beyond the end of 2006 because of the complexity of the required changes in systems. It is our preference to have an institution "do it right" rather than "do it quickly." We do not plan to force any bank into a regime for which it is not ready, but supervisors do expect a formal plan and a reasonable implementation date. At any time during that period, we can slow down the schedule or revise the rules if there is a good reason to do so.

#### H.R. 2043

This subcommittee has asked the Federal Reserve for its views on H.R. 2043. We agree with a key motivation of that bill: to ensure that the agencies work together and that any position taken in negotiation by U.S. representatives is reached with full understanding of its effect on the banking industry and the public more generally. We believe that the current process does just that, and that the bill may not help in the achievement of those goals and could be counterproductive. The agencies have long demonstrated that on various matters, including Basel II, they have been able to reach agreement and come to a common position. Sometimes the process is smooth and other times less so, but it always ends in a position that we believe reflects the best interests of the United States. The agencies also have demonstrated their open mindedness and willingness to look at facts, to evaluate alternative views and judgments, and to change their minds on the basis of both public comment and interagency discussions; my

statement gives some examples of this. The agencies need to continue to have the room to disagree and work out their differences on the basis of their experience and expertise.

A formal structure to force consensus on Basel issues is not needed.

Indeed, the Board is concerned that, if adopted, H.R. 2043 would reduce our ability to negotiate with other countries' representatives on matters of importance to American banks and our financial system. Our counterparties would know that we could not bargain or make commitments until we received congressional guidance, a process likely to slow negotiations or bring them to a halt. Meanwhile, Basel I, an outdated and ineffective regulatory structure for our largest banks, would continue in effect.

Finally, we believe that the bill, if enacted, would set an unfortunate precedent of congressional involvement in technical supervisory and regulatory issues. We both expect and welcome congressional oversight, but H.R. 2043 is, in our judgment, unnecessary.

#### Summary

The existing capital regime must be replaced for the large, internationally active banks whose operations have outgrown the simple paradigm of Basel I and whose scale requires improved risk management and supervisory techniques in order to minimize the risk of disruptions to world financial markets. Fortunately, the state of the art of risk measurement and management has improved dramatically since the first capital Accord was adopted, and the new techniques are the basis for the proposed new Accord. In my judgment, we have no alternative but to adopt, as soon as practical, these approaches for bank supervision of our larger banks.

The Basel II framework is the product of extensive multiyear dialogues with the banking industry regarding evolving best practice risk-management techniques in every significant area of banking activity. Accordingly, by aligning supervision and regulation with these techniques, it provides a great step forward in protecting our financial system and that of other nations to the benefit of our citizens. Basel II will provide strong incentives for banks to continue improving their internal risk-management capabilities as well as the tools for supervisors to focus on emerging problems and issues more rapidly than ever before.

Unfortunately, no change in bank regulatory policy can be made without inevitably confronting a number of dissatisfied banks, regardless of the potential benefits of the proposed change for the banking system, the economy, and the public as a whole. We now face three choices. We can reject Basel II. We can sidetrack it by delay. Or we can continue the domestic and international process, using the public comment and implementation process to make whatever changes are necessary to make Basel II work more effectively and efficiently. The first two options require staying with Basel I, which is simply not viable for our largest banks. The third option recognizes that an international capital framework is in the self-interest of the United States, since our institutions are the major beneficiary of a sound international financial system. The Board strongly supports the third option.

I am pleased to appear before you today to report on this effort as it nears completion. Open discussion of complex issues has been at the heart of the Basel II development process from the outset and will continue to characterize it as Basel II evolves further.

#### APPENDIX 1

#### **Modifications to the New Basel Capital Accord**

The following table provides a summary of modifications made by the Basel Committee on Banking Supervision (Committee) to its proposal for a New Basel Capital Accord (New Accord). Since release of its first consultative paper in June 1999, the Committee has been engaged in extensive dialogue with banking organizations and other interested parties regarding the new capital adequacy framework. These consultations have included release of three consultative papers as well as the completion of several quantitative impact studies in which banks were asked to assess the impact of the Committee's proposal on their current portfolios.

In many instances, the additional information obtained from market participants was instrumental to additional analyses conducted by the Committee. The table captures changes made to the approaches to be implemented in the United States: the Advanced Internal Ratings Based (A-IRB) approach to credit risk and the Advanced Measurement Approach (AMA) to operational risk. Modifications to the Standardized approach to credit risk, as well as the Basic Indicator and Standardized approach to operational risk are not featured.

### Proposals contained in the Committee's first consultative paper (CP1) issued June 1999

Modifications captured in the Committee's second consultative paper (CP2) issued January 2001 Modifications captured in the Committee's third consultative paper (CP3) issued April 2003

#### Minimum Capital Requirements (Pillar 1 of the proposed New Accord)

#### Advanced Internal Ratings-based (IRB) Approach to Credit Risk: General Comments

The Committee's first consultative paper (CP1) introduced the possibility of an IRB approach for calculating minimum capital requirements for credit risk. The concept of an IRB approach was meant to allow banks' own estimates of key risk drivers to serve as primary inputs to the capital calculation, subject to minimum standards.

CP1 made reference to further work of the Committee (in consultation with the industry) on key issues related to the IRB approach. The remainder of that section of CP1 highlighted some of the issues the Committee expected to consider. The Committee's second consultative paper (CP2) described the IRB framework in detail. Among other elements, CP2 defined the various portfolios and outlined the mechanics of how to calculate the IRB capital charges. Another critical element was presentation of the minimum qualifying criteria that banks would have to satisfy to be able to use the IRB approach to credit risk.

CP2 also outlined expectations regarding adoption of the advanced IRB approach across all material exposure types of a banking organization. A floor on the minimum capital requirement was specified. After consideration of the feedback provided by industry participants, particularly that gathered through quantitative impact studies, the Committee made adjustments to the level of capital required by the IRB approaches.

Among other elements (as described below), the IRB approach was refined to allow for greater differentiation of risk. For example, the Committee approved a new, more appropriate treatment of loans made to small- and medium-enterprises (SMEs). The retail portfolio was divided into three subcategories. CP3 also outlined a treatment for specialized lending.

The qualifying criteria for the IRB approach have been streamlined. The criteria are now described in a principles-based manner. CP3 also simplified the floor capital requirement such that there will be one floor that applies to banks adopting the IRB approach to credit risk and advanced measurements approaches (AMA) to operational risk for the first two years following implementation of the proposed Accord.

# **Exposure Type:** 1. Wholesale (corporate, sovereign and bank)

Not specified in CP1.

Wholesale exposures were defined to include corporate, sovereign and bank exposures. Banks are expected to assess the risk of each individual wholesale exposure.

CP2 described the mechanism for assessing the risk of each wholesale exposure. The quantitative inputs (probability of default (PD), loss given default (LGD), exposure at default (EAD) and effective remaining maturity (M)) by exposure type were specified. Additionally, CP2 relates the quantitative inputs to the risk weight formula applicable for all three wholesale exposures. Further, minimum qualifying standards for use of the IRB approach were described in detail.

An adjustment was introduced for reflecting in regulatory capital any concentrations a bank may have to a single borrower within its wholesale portfolio. Based on findings from the impact studies conducted by the Basel Committee, and in response to industry concerns about the potential for cyclical capital requirements and the treatment of SMEs, the slope of the wholesale risk weight function has been flattened. This has the effect of producing capital requirements that differ by a smaller amount as the estimated PD of an exposure increases.

CP3 confirmed that banks making use of the advanced IRB approach would need to take account of a loan's effective remaining maturity (M) when determining regulatory capital, but that supervisors may exempt smaller domestic borrowers from that requirement.

As part of the treatment of corporate exposures, another adjustment to the risk weight formula has been made that results in a lower amount of required capital for credit extended to SMEs versus that extended to larger firms.

In response to industry feedback, the proposed adjustment for single borrower concentrations has been eliminated given the additional complexity it would introduce into the IRB framework. That said, banks would be expected to evaluate concentrations of credit risk under Pillar 2 of the proposed Accord.

			T
2. Retail	Not specified in CP1.	Retail was identified as a single exposure type. The risk weight formula, the inputs to be provided by banks and minimum qualifying criteria also were specified. In contrast to the individual evaluation required for wholesale exposures, it is proposed that banks assess retail exposures on a pool basis.	Retail has been sub-divided into three separate exposure types (residential mortgages, qualifying revolving exposures (e.g. credit cards), and other retail exposures). Each of the three exposure types has its own risk weight formula in recognition of differences in their risk characteristics.  Qualifying criteria pertaining to retail exposures have been further defined.
3. Specialized Lending	Not specified in CP1.	The second consultative paper provided a definition of project finance. An IRB risk weight formula for this exposure type was not specified.	Specialized lending (SL) has been defined to include various financing arrangements (project, object and commodities). Additionally, this exposure category has been defined to include income producing real estate and the financing of commercial real estate that exhibits higher loss rate volatility.
			For all but one SL category, qualifying banks may use the corporate risk weight formula to determine the risk of each exposure. When this is not possible, an additional option only requires banks to classify SL exposures into five distinct quality grades with specific capital requirements associated with each.
			A forthcoming Federal Reserve white paper will explore issues surrounding the valuation of commercial real estate.

4. Equity	Not specified in CP1.	A definition of equity exposures was provided in CP2. Reference was made to treating such holdings in a manner similar to that required of banks' investments in securities firms or insurance companies.	The definition of equity exposures has been expanded. CP3 outlines two specific approaches to determining capital for equity exposures. One builds on the IRB treatment of corporate exposures. The second provides banks with opportunity to model the potential decrease in the market value of their holdings. CP3 also described the qualifying criteria for such exposures.
5. Purchased Receivables	Not specified in CP1.	Not specified in CP2.	CP3 describes a capital treatment for purchased receivables (retail and corporate). Subject to certain qualifying criteria, banks will be permitted to assess capital on a pool basis for corporate receivables as they are permitted to do for retail exposures and purchased retail receivables.
Qualifying Criteria for Use of the Advanced IRB Approach	Qualifying criteria were not specified in CP1. However, a sound practice paper on the management of credit risk was issued shortly after CP1.	Qualifying criteria were developed to ensure an appropriate degree of consistency in banks' use of their own estimates of key risk drivers in calculating regulatory capital. The qualifying criteria for corporate exposures were provided in detail with less discussion of those pertaining to retail, sovereign and bank exposures.	The qualifying criteria have been streamlined. In response to industry feedback, the criteria are now described in a principles-based manner for all IRB exposure types. The intent is to allow for consistent application of the requirements, as well as for innovation and appropriate differences in the way in which banking organizations operate.
Other Elements of the IRB Framework	Not specified in CP1.	Not specified in CP2.	The IRB capital requirement includes components to cover both expected and unexpected losses. CP3 specified methods for recognizing loan loss reserves as an offset to the expected loss component of risk weighted assets by exposure type. CP3 also specified a definition of default and factors to be considered for use in the IRB approach.

Credit Risk Mitigation (e.g. collateral, guarantees, and credit derivatives)	An IRB treatment for recognizing credit risk mitigants was not specified in CP1.	A credit risk mitigation (CRM) framework was introduced in CP2. It allowed banks to recognize collateral in their own estimates of default.  Guarantees and credit derivatives remain subject to a treatment where the risk weight of the guarantor is substituted for that of the borrower.	The qualifying criteria concerning recognition of CRM techniques have been further clarified. Banks are provided with greater flexibility to recognize guarantees and credit derivatives in the IRB risk inputs (e.g. PD and LGD). However, banks are not permitted to recognize "double default" effects when determining the impact of CRM techniques on their capital requirements. A Federal Reserve white paper attempts to analyze the issues surrounding default of a borrower and a guarantor ("double default") for losses to be incurred on a hedged credit exposure.
Securitization	An IRB treatment of securitization was not specified in CP1.	CP2 outlined an IRB treatment of securitization. Initial thoughts about how to address exposures held by banks (qualifying for the IRB treatment) that originate securitizations and those that invest in transactions put together by other parties were discussed in general terms. It was indicated that the Committee would continue its work to refine the IRB treatment of securitization during the comment period for CP2.	An IRB treatment of securitisation is discussed in detail. Banks may (subject to certain qualifying criteria) base the capital requirement on the external rating of a securitization exposure or the IRB capital requirement for the pool of assets underlying a given securitization. Capital treatments for liquidity facilities and securitizations containing early amortization provisions also have been specified.

### Advanced Measurement Approaches (AMA) to Operational Risk

An explicit charge for operational risk was discussed in the context of capital requirements for other risks that the Committee believed to be sufficiently important for banks to devote the necessary resources to quantify and to incorporate into their capital adequacy determinations. Reference was made to a range of possible approaches for assessing capital against this risk.

The internal measurement approach (IMA) was introduced in CP2 for determining capital for operational risk. Subject to meeting a set of qualifying criteria, banks were expected to categorize their operational risk activities into business lines. Based on a number of inputs (some to be supplied by the supervisor and others to be estimated by banks themselves), a capital charge would be determined by business line. A floor was established for banks using the IMA below which minimum capital for operational risk could not fall.

The Committee confirmed that operational risk would be treated under Pillar 1 of the proposed New Accord. After extensive consultation with the industry, the advanced measurement approaches (AMA) for operational risk has been developed.

The AMA builds on banks' rapidly developing internal assessment systems. Banks may use their own method for assessing their exposure to operational risk, so long as it is sufficiently comprehensive and systematic, subject to satisfying a set of principles-based qualifying criteria.

Banks using the AMA may recognize insurance as an operational risk mitigant when calculating regulatory capital. The separate floor on the capital charges for operational risk introduced in CP2 has been abandoned, as noted in the general discussion of the Advanced IRB approach.

# Supervisory Review (Pillar 2 of the proposed New Accord)

Four principles of supervisory review were established. In sum, the principles discuss the need for (i) banks to conduct their own assessments of capital adequacy relative to risk; (ii) supervisors to evaluate such assessments and to take appropriate action when necessary; (iii) supervisors to expect banks to operate above the minimum regulatory capital ratios; and (iv) supervisors to intervene at an early stage to prevent capital from falling below prudent levels.

The four principles of supervisory review were further refined in CP2. Reference was made to existing guidance developed by the Committee relating to the management of banking risks.

Supervisory expectations regarding the treatment of interest rate risk in the banking book were outlined in this section of CP2.

To help address potential concerns about the cyclicality of the IRB approach, the Committee agreed that a meaningfully conservative credit risk stress testing by banks using the IRB approach would be required to ensure that they are holding a sufficient capital buffer.

Additionally, the section on supervisory review (Pillar 2) discusses the need for banks to consider the definition of default, residual risks, credit risk concentration and the risk associated with securitization exposures.

## Market Discipline (Pillar 3 of the proposed New Accord)

Some of the Committee's early expectations regarding bank disclosures were outlined. Reference was made to future work aimed at producing more detailed guidance on disclosures of key information regarding banks' capital structures, risk exposures and capital adequacy levels.

A comprehensive framework regarding banks' disclosures was provided. Qualitative and quantitative disclosures by exposure type were outlined. Distinctions were drawn between core and supplementary disclosure recommendations, and those considered requirements.

In response to industry feedback, the Committee completed efforts to clarify and simplify the market discipline component of the proposed New Accord. The aim was to provide third parties with enough information to understand a bank's risk profile without imposing an undue burden on any institution. The disclosure elements have been streamlined to accomplish this objective, and are now regarded as requirements.

# APPENDIX 2

# Large Losses from Operational Risk 1992-2002

10 Large Operational Losses Affecting Banks and Bank Affiliates

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	Amount			
Loss #	(\$M)	Firm	Year	Description
1	1,110	Daiwa Bank Ltd.		Between 1983 and 1995, Daiwa Bank incurred \$1.1 billion in losses due to unauthorized trading.
2	1,330	Barings PLC	1995	A \$1.3 billion loss due to unauthorized trading triggered the bank's collapse.
3	900	J.P. Morgan Chase	2002	J.P. Morgan Chase established a \$900 million reserve for Enron-related litigation and regulatory matters.
4	770	First National Bank Of Keystone	2001	The bank failed due to embezzlement and loan fraud perpetrated by senior managers.
5	691	Allied Irish Banks	2002	Allied Irish Bank incurred losses of \$691 million due to unauthorized trading that had occurred over the previous five years.
6	636	Morgan Grenfell Asset Management (Deutsche Bank)	1997	A fund manager violated regulations limiting investments in unlisted securities for three large mutual funds.  Deutsche Bank had to inject GBP 180 million to keep the funds liquid, with total costs in the matter exceeding GBP 400 million.
7	611	Republic New York Corp.	2001	Republic Bank paid \$611M in restitution and fines stemming from its role as custodian of securities sold by Princeton Economics International, which had issued false account statements and commingled client money.
8	490	Bank of America	2002	Bank of America agreed to settle class action lawsuits filed in the wake of its merger with NationsBank. The suits alleged omissions relating to its relationship with D.E. Shaw & Co.
9	440	Standard Chartered Bank PLC	1992	Standard Chartered Bank lost \$440M in connection with the Bombay stock market scandal. A government panel charged that the banks involved broke Indian banking laws and guidelines while trading in government bonds, investing money for corporate clients, and giving money to brokers to invest in the Bombay stock market.
10	440	Superior Bank FSB	2001	The bank failed due to improper accounting related to retained interests in securitized subprime loans.

Note: Loss Amounts are obtained from public sources and are gross loss amounts prior to possible recoveries.